



# Analysis of the Organization's Climate and Rewards, as well as Effects on Achieving Motivation for Educational Staff at University of Sumatera Utara

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**Abstract.** Education staff are an important factor in assisting with implementing educational activities. Education staff with dedication and high achievements are required to enhance educational services. Based on these considerations, this study intends to analyze the impact of organizational climate and rewards on the motivation of educational personnel at the University of Sumatera Utara (USU). A total of 93 USU education staff respondents were selected purposively using the quota sampling technique. Using multiple regression models to analyze the data. The findings revealed that the organizational climate and rewards have good and valuable benefits on academic staff motivation at the USU. Furthermore, a conducive organizational climate and promising rewards are required to increase motivation for achieving educational staff.

**Keywords:** Achievement Motivation · Organizational Climate · Reward

## 1 Introduction

The University of Sumatera Utara (USU) is a state university with a legal entity that manages academic and non-academic fields autonomously. The USU campus was established on June 4, 1952, and consists of 15 (fifteen) faculties and 1 (one) graduate school. USU's human resources are divided into lecturers and education staff. Laboratory assistants, technicians, and librarians are all part of the educational staff. The educational staff is responsible for managing, developing, and supervising administrative and technical services to support the educational process in educational units.

The campus annually organizes the selection of Education Personnel for outstanding achievements to improve the achievements of the educational staff at the USU. This selection activity uses several criteria and aims to motivate educational staff in each unit to do their best service. However, it turns out that the participation of education personnel in this event is also quite low. This is considered to be linked to the campus's low motivation and work atmosphere.

According to McClelland [1], achievement motivation is an individual's effort to mobilize all of his abilities to hold out all activities which become his responsibility to

achieve certain targets. Furthermore, [2] define achievement motivation as something someone does as a boost optimally by using all of his abilities to overperform other people until the individual achieves success. In his report, [3] defines achievement motivation as an encouragement in a specific individual to do or perform a task or activity as well as possible to accomplish a commendable output. While [4] stated that achievement motivation encourages the idea of success, once people only seek achievements rather than rewards for success, those who will be more eager to do something better and always complete their tasks and responsibilities. Furthermore, [5] defines achievement motivation as the desire to achieve success and excellence by fully utilizing one's abilities. According to [1] achievement motivation is affected by internal and external factors. The internal factor includes the probability of success, Fear of failure, Values, self-efficacy, age, experience, and gender. The external factor includes environmental and social and individual relationships. Furthermore, [3] stated that achievement motivation factors are divided into two factors Intelligence level (IQ) and personality.

The organizational climate is the habitat in which employees of an organization carry out work. The dynamic concept in the organization is influenced by the climate surrounding it [2]. [6] states that organizational climate is a collection of employee perceptions regarding employee settings, the desire for work in the organization, and the social environment in the organization. So organizational climate is the expectations and perspectives of individuals towards their organization. [7], the company establishes that the relationship between the combination of values and goals is considered the organizational climate, it can be concluded that the synergy between the relationship between employees and the values and goals set by the company is the organizational climate. The organizational climate can be measured by using 6 (six) dimensions, those were: structure, standards, responsibility, award, support, and commitment [8].

The Reward has a meaning of rewards, prizes, awards, or rewards. According to [4], rewards in companies are often in the form of gifts in the form of certificates and some money from the company for employees who have achievements. There are also companies that give rewards to employees for years of service and according to the English dictionary, Reward means an award or gift. Reward indicators are divided into two categories those were intrinsic and extrinsic. The intrinsic category includes achievement, a feeling of achievement, informal confession, job satisfaction, self-development, and status. While extrinsic indicators include, formal acknowledgment, allowance, incentive payment, work environment, promotion, and social relations. Based on those considerations, this research aimed to (1). Analyze the influence of organizational climate to support the achievement motivation of education personnel at the University of Sumatera Utara (2). Analyze the effect of rewards in supporting the achievement motivation of education staff at the University of Sumatera Utara.

## 2 Methods

This research was conducted at the USU campus, Jl. Dr. T Mansyur No. 9 Medan from March 2021 to June 2022. The study employed quantitative associations as well as case studies. This approach is supported by surveys, data collection via interviews, and the distribution of questionnaires to respondents. Relationship (association), such

that, writing that attempts to explain the existence of a relationship between two or more variables in the object of study. The number of respondents in this research was calculated by using the Slovin formula [9].

The respondents used in this study were all educational staff registered at the USU until now. Based on the criteria used, as many as 93 education personnel were used as respondents in this study.

The data obtained in this study were then analyzed using multiple linear regression. The influence of independent variables was analyzed using multiple linear regression consisting of Organizational Climate (X1), Reward (X2), and achievement motivation(Y). Writing multiple linear regression equations can be written as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \quad (1)$$

where:

- Y = Achievement motivation
- X1 = Organizational climate
- X2 = Rewards
- $\alpha$  = constant
- $\beta_1, \beta_2$  = Regression coefficient of variables X1 and X2
- $\varepsilon$  = Unexamined variables

## 3 Result and Discussion

### 3.1 Classic Assumption

#### Normality Test

The normality test aims to test the normality of the regression model used. Test and assume that the residual value follows the normal distribution. In this study, the normality test against residuals uses the Kolmogorov-Smirnov test. The degree of significance used. The basis of decision-making is to look at the probability numbers conditions. Result of Normality test show by Table 1.

Note that based on Table 1, it is known as the probability value or Asymp. Sig. (2-tailed) of 0.545. Because the probability value, which is 0.545, is greater than the significance level, which is 0.05. This means that the data is normally distributed. Figure 1 show normality test with a normal probability plot as follow:

Figure 1 is a normality test with a normal probability plot approach, while Fig. 2 is a normality test using a histogram approach. It is known in Fig. 1, the points spread around the diagonal line, while in Fig. 2, it can be seen that the curve is in the form of a normal curve, so that the data is normally distributed.

#### Multicollinearity Test

To check whether there is multicollinearity, it can be seen from the variance inflation factor (VIF) value. A VIF value that is more than 10 indicates that an independent variable has multicollinearity [10]. Result of multicollinearity test show by Table 2.

Table 1 .

		Unstandardized Residual
N		93
Normal Parameters b	Mean	.0000000
	Std. Deviation	.29800742
	Absolute	.083
	Positive	.081
	Negative	-.083
Kolmogorov-SmirnovZ		.799
Asump. Sig. (2-tailed)		.545

- a. Test distribution Normal.
- b. Calculated from data.

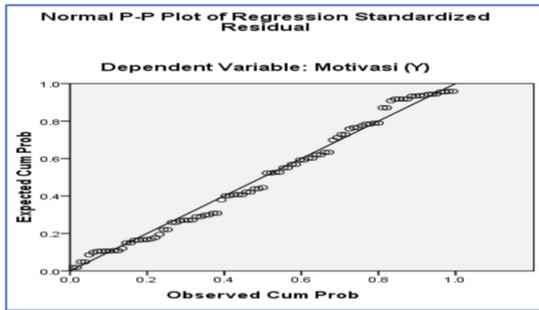


Fig. 1. Normality test for normal probability plot

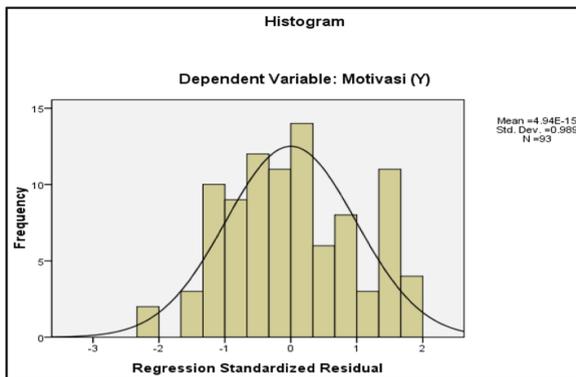


Fig. 2. Histogram normality test

**Table 2.** Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Organizational Climate (X1)	.878	1.139
	Rewards (X2)	.878	1.139

Note that based on Table 2, it is known that the VIF value of organizational climate is 1,139 and the VIF value of rewards is 1,139. Because all VIF values are  $< 10$ , it is concluded that there is no multicollinearity.

**Table 3.** Heteroscedasticity Test with Glejser. Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constants)	.298	.099		3.005	.003
	Organizational Climate (X1)	-.024	.025	-107	-.952	.344
	Rewards	.013	.021	.066	.592	.556

### Heteroscedasticity Test

The Glejser statistical test was chosen because it has better accuracy of results compared to the plot graph test which can cause bias. The Glejser test was performed by regressing the free variable against its residual absolute value against the dependent variable [10]. The criteria used to express whether or not heteroskedasticity occurs among the observational data can be explained using the significance coefficient. The coefficient of significance should be compared with the previously set significance level (5%). If the significant coefficient is greater than the specified significance level, it can be concluded that there is no heteroscedasticity (homoscedasticity). If the significant coefficient is smaller than the specified significance level, it can be concluded that there is heteroscedasticity. Result of heteroscedasticity test show by Table 3.

Based on Table 3, it is known that the value of Sig. The glacier of organizational climate is  $0.344 > 0.05$ , the value of Sig. The glacier of reward is  $0.556 > 0.05$ . It is known that the entire value of Sig. Glejser of each independent variable is above 0.05, it is concluded that there is no heteroscedasticity.

### 3.2 Multiple Linier Regression Analysis

The analytical method used in this study is to use multiple linear regression analysis. Multiple linear regression analysis is used when the number of independent variables is at least 2 independent variables. The use of multiple linear regression analysis is intended

**Table 4.** Multiple Linear Regression Analysis

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constants)	.257	.183		1.401	.165		
	Organizational Climate (X1)	.847	.046	.835	18.567	.000	.878	1.139
	Rewards	.163	.039	.185	4.115	.000	.878	1.139

a. Dependent Variable: Motivation (Y)

to determine the effect of the independent variable which is commonly referred to as the dependent variable which is commonly referred to as. Result of multiple linear regression analysis XY show by Table 4.

Based on Table 4, the following multiple linear regression equation was obtained.

$$Y = 0.257 + 0.847X1 + 0.163X2 + e$$

The constant value is 0.257. This value can be interpreted if the organizational climate and rewards have no effect on the dependent variable of motivation, then the value of the dependent variable of motivation is 0.257. The regression coefficient value of the organizational climate variable is 0.847, which is positive. This means that when the organizational climate increases by 1 unit, then the motivation tends to increase by 0.847. The regression coefficient value of the reward variable is 0.163, which is positive. This means that when the reward increases by 1 unit, then the motivation tends to increase by 0.163.

### 3.3 Hypothesis Test

#### Simultaneous Significance Test (F Test)

The F test aims to test the effect of the independent variables together or simultaneously on the dependent variable of motivation. Based on Table 5, it is known that the calculated F value is 236.498 and the Sig value. is 0.000. It is known that the calculated F value is 236.498 > F table 3.09 and the Sig value is 0.000 < 0.05, then the organizational climate and rewards together or simultaneously have a significant effect on motivation.

#### Partial Significance Test (t-Test)

Statistical t-test was used to determine the level of significance of the effect of each independent variable on the dependent variable. Table 6 presents the value of the regression coefficient, as well as the value of the t statistic for partial effect testing.

Based on the results of the t-test the regression coefficient value of the organizational climate variable is 0.847, which is positive. This means that the organizational climate has

**Table 5.** Simultaneous Effect Test with Test with Test *FF*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42,940	2	21,470	236,498	.000a
	Residual	8.170	90	.091		
	Total	51.110	92			

a. Predictors: (Constant), Reward (X2), Organizational Climate (X1)

b. Dependent Variable: Motivation (Y)

**Table 6.** Significance Test of Partial Effect (Test)

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constants)	.257	.183		1.401	.165		
	Organizational Climate (X1)	.847	.046	.835	18.567	.000	.878	1.139
	Rewards	.163	.039	.185	4.115	.000	.878	1.139

a. Dependent Variable: Motivation (Y)

a positive effect on motivation. The statistic t or t count of organizational climate is 18,567 and the value of Sig. is 0.000, i.e. <0.05 level of significance, then the organizational climate has a significant effect on motivation. So it can be concluded that organizational climate has a positive and significant effect on motivation. The regression coefficient value of the reward variable is 0.163, which is positive. This means that reward has a positive effect on motivation. It is known that the statistic t or t count of the reward is 4.115 and the value of Sig. is 0.000, i.e. < the significance level of 0.05, then the reward has a significant effect on motivation. So it can be concluded that reward has a positive and significant effect on motivation.

### Coefficient of Determination Analysis

The coefficient of determination is a value (proportion value) that measures how much the ability of the independent variables used in the regression equation to explain the variation of the dependent variable  $R^2$ . Coefficient of determination show by Table 7.

Based on Table 7 it is known that the coefficient of determination (R-Square) is 0.840. This value can be interpreted as organizational climate variables and rewards are able to influence motivation by 84%, the remaining  $100\% - 84\% = 16\%$  is explained by other variables or factors.

**Table 7.** Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917a	.840	.837	.30130

a. Predictors: (Constant), Reward (X2), Organizational Climate (X1)

b. Dependent Variable: Motivation (Y)

## 4 Conclusion

Based on the results of research regarding the analysis of organizational climate and rewards and their influence on the achievement motivation of education staff at the University Sumatera Utara, it can be concluded:

1. Organizational climate and rewards affect the motivation for achieving educational staff at the University of North Sumatra.
2. Organizational climate and rewards can influence motivation by 84% and the remaining 16% by other factors.

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## References

1. McClelland, D. Human Motivation. (Cambridge University Press).
2. Newstrom, J. . & Davis, K. Behavior in Organizations. (Erlangga, 2007).
3. Mangkunegara. Company Resource Management. (PT. Rosdakarya Youth, 2011).
4. Munandar. Industrial and Organizational Psychology. (Universitas Indonesia, 2014).
5. Woolfolk, A. E. No Title. (Allyn and Bacon, 1995).
6. Azhary, A. P. The Effect of Competence and Organizational Climate on Employee Performance at PT. Jasa Marga (Persero) Tbk Belmer Brach. (Universitas Medan, 2017).
7. Ardiansyah. Pengaruh Budaya Organisasi dan Iklim Organisasi Terhadap Loyalitas Kerja Karyawan (Studi Kasus pada PT. Bank NEgara Indonesia KCU Pekanbaru). JOM FISIP 4, (2017).
8. Wirawan. Organizational Culture and Climate. (Salemba Emapt, 2008).
9. Sutrisno, E. Human Resource Management. (Kencana Prenada Media Group, 2009).
10. Ghozali, I. Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi. (Badan Penerbit Universitas Diponegoro, 2013).

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